

## REMARKS

Applicants assume that the amendments filed on September 5, 2007 have been entered as there is no indication to the contrary in the Advisory Action of September 28, 2007. Those amendments added no new matter to this application and are supported by the specification. Accordingly, claims 1-59 are pending in the Application. Reconsideration of the application is respectfully requested.

In the Final Office Action of July 13, 2007, the Examiner rejected Claims 1-55 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,627,759 ("Bearden et al."). Claims 56-59 were allowed.

The rejections from the Final Office Action of July 13, 2007 are discussed below in connection with the various claims.

No new matter has been added. Reconsideration of the application is respectfully requested in light of the following remarks.

As previously allowed claims 56-59 have been amended, Applicants withdraw their previously filed Notice of Copying Claims.

This response is accompanied by a request for interview prior to the next office action. Applicants submit that an interview may expedite the prosecution of this application.

In the Final Office Action of July 13, 2007, claims 1-55 were rejected under 35 U.S.C. § 102(b) as being anticipated by Bearden. In particular, with respect to at least independent claims 1, 6, 10, 15, 19, 24, 50, 51, 52 and 53, the Examiner notes:

wherein said network protocol is one of e-mail, File Transfer Protocol (FTP), Hypertext Transfer Protocol (HTTP), Dynamic Host Configuration Protocol (DHCP), Hypertext Markup Language (HTML), or Extensible Markup Language (XML) (Claims 1, 2, 6, 10, 11, 15, 19, 20, 24, and 50-53: see col. 7, line 60 through col. 8, lines 8: The Examiner notes that computers on a LAN must communicate in one of the many standard protocols, including e-mail, FTP, SOAP, Mime, HTTP, HTTPS, DHCP, PPP, HTML, SMTP, and XML, which is inherently taught by the reference). *See* the Final Office Action of July 13, 2007, pages 2-3.

As discussed in Applicants' September 5, 2007 Response, Applicants respectfully disagree that the "standard protocols, including e-mail, FTP, SOAP, Mime, HTTP, HTTPS, DHCP, PPP, HTML, SMTP, and XML" are inherently taught by Bearden.

The claimed protocols, i.e. e-mail, FTP, SOAP, Mime, HTTP, HTTPS, DHCP, PPP, HTML, SMTP, and XML, are commonly referred to as Application Layer protocols as they operate to implement various applications executing on computer systems and associated networks. These are also referred to as Layer 7 protocols in reference to their position within the Open System Interconnection standard for defining the different layers or stages that data must go through in order to travel between devices over a network. *See "How OSI Works,"* by Jeff Tyson available at <http://computer.howstuffworks.com/osi.htm/printable> (last accessed on August 27, 2007). In particular, these layers include:

#### Application Set

Layer 7: Application - This is the layer that actually interacts with the operating system or application whenever the user chooses to transfer files, read messages or perform other network-related activities.

Layer 6: Presentation - Layer 6 takes the data provided by the Application layer and converts it into a standard format that the other layers can understand.

Layer 5: Session - Layer 5 establishes, maintains and ends communication with the receiving device.

#### Transport Set

Layer 4: Transport - This layer maintains flow control of data and provides for error checking and recovery of data between the devices. Flow control means that the Transport layer looks to see if data is coming from more than one application and integrates each application's data into a single stream for the physical network.

Layer 3: Network - The way that the data will be sent to the recipient device is determined in this layer. Logical protocols, routing and addressing are handled here.

Layer 2: Data - In this layer, the appropriate physical protocol is assigned to the data. Also, the type of network and the packet sequencing is defined.

Layer 1: Physical - This is the level of the actual hardware. It defines the physical characteristics of the network such as connections, voltage levels and timing.

In contrast, Bearden merely discloses:

the ports for communicating with the power generator or utility 80 preferably are electrically connected to the microprocessor or controllers 45, 48. These ports preferably include an RS-232 interface port and/or a 20 milliamper ("mA") current loop 74, an optical port 73, and two 71, 72 of either an internal modem, a direct interface, a protocol converter, or an RS-485 port. The internal modem is arranged for communicating with utility customer or power customer auxiliary inputs and outputs 62, 63. The direct interface ("I/F") is arranged to connect to an external modem 51 which may provide either additional or duplicative data to the processors 45, 48. The protocol converter and the RS-485 port are likewise arranged to provide data communication to the operations center 22 as well as the local area network ("LAN") of the utility company or industrial consumer. The optical port 73 preferably is arranged for data communication through a power generator port to laptop computers or the like. The current loop 74 provides secure data communication and, preferably, is arranged for data communication with the auxiliary inputs 81, 85 from the utility 80, such as an encoder, printer, RTU, various software or hardware tools, personal computer, remote data display, or the like. The external modem 51, the SCADA 52, the LAN 53, and the laptop computers 54 are connected in electrical communication with the desired group 82, 83, 84, 86 of the utility or power generator 80 as illustrated. *See* Bearden, Col. 7, line 49 – Col. 8, line 8.

At most Bearden discloses various "physical" or "layer 1" and/or "data" or "layer 2" layers which may be used with the disclosed devices for communications, such as RS-485 serial communications ports, optical ports, etc. The disclosure of a local area network ("LAN") is in concert with the disclosure of the RS-485 port and implies, at most, a serial port based LAN such as a Modbus based network. For example, the various Ethernet standards, such as 10 base T, also define both the physical and data layers of a particular network. Beyond this disclosure, however, there is no suggestion, implied or otherwise, as to higher level protocols which may be utilized with the disclosed device. Further, Applicants' claimed application layer protocols are based on or used in conjunction with the TCP/IP suite of protocols which are used at Layers 3 and 4, referred to as the Network and Transport layers. Bearden fails to disclose that the disclosed devices could

utilize TCP/IP for communications and the disclosure of serial ports, optical ports and modems does not suggest or imply such. TCP/IP based protocols are commonly implemented on packet based bus-type networks such as Ethernet based networks which Bearden fails to disclose or suggest.

Various references to Supervisory Control and Data Acquisition (“SCADA”) system are provided by Bearden with reference to the compatibility of the disclosed device. However SCADA is a term that generally refers to control and measurement systems but does not imply the use of any particular communications protocols or media.

In the Advisory Action of September 28, 2007, the Examiner indicated that he “...disagrees with Applicants arguments with regard to the fact that Bearden inherently teaches the various communication protocols ...” but provides no basis for his disagreement.

Applicants maintain that Bearden fails to inherently teach “standard protocols, including e-mail, FTP, SOAP, Mime, HTTP, HTTPS, DHCP, PPP, HTML, SMTP, and XML[.]” Further, it would not be obvious to one of skill in the art to combine the device of Bearden with the claimed protocols. As noted above, implementation of the claimed protocols requires significant alterations to the underlying functionality of the device, rather than mere substitution of components, such as the addition of various protocol software layers enabling the device’s underlying core functionality to interact with the claimed application layer protocols. This may require that the device’s core functionality be modified to interact with these software layers rather than interact via the conventional means/interfaces disclosed in Bearden. Further, implementation of particular application layer protocols presumes that users of the device will use a compatible application to interact with the device using the given protocol. Bearden fails to disclose any indication of what applications users of the disclosed device would use to interact with the disclosed device. With respect to store and forward type protocols, such as email protocols, non-real time interactivity is provided for. Bearden fails to disclose non-real time interactivity, instead disclosing that the illustrated embodiment “...advantageously provides real time data communications....” See Bearden, Col. 6, line 15- Col. 7, line 9. Further, as discussed in Applicants’ specification, application layer protocols are more likely to be permitted through

firewalls without modification thereto, and circumvent restrictions on unsolicited communications with an IED, issues which were not contemplated by Bearden.

Generally, the use of non-proprietary protocols provides for more ubiquitous access by non-proprietary client applications rather than proprietary applications which are more limiting, however Bearden fails to discuss either.

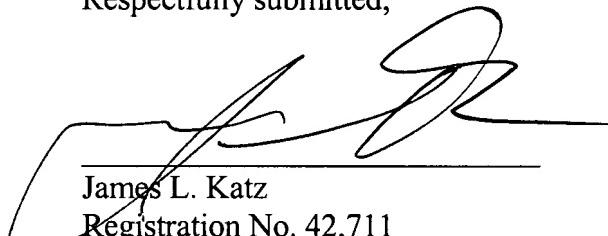
For at least these reasons, the independent claims 1, 6, 10, 15, 19, 24, 50, 51, 52 and 53 are not anticipated by Bearden as Bearden fails to disclose all of the limitations of these claims, either directly or inherently. Dependent claims 2-5, 7-9, 11-14, 16-18, 20-23, and 25-49 were also rejected as being anticipated by Bearden. These claims should be allowed for reasons set forth above for the independent claims. Accordingly, Applicants request that the Examiner withdraw these rejections of the pending claims.

Further, amended claims 56-59 should also be allowed for reasons set forth above.

### **CONCLUSION**

Each of the rejections in the Final Office Action of July 13, 2007 has been addressed and no new matter has been added. Applicants submit that all of the pending claims are in condition for allowance and notice to this effect is respectfully requested. The Examiner is invited to call the undersigned if it would expedite the prosecution of this application.

Respectfully submitted,



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Date: October 31, 2007

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